

AMENDMENTS TO THE DRAWINGS

Please amend the Figures as shown in the enclosed replacement sheets. The attached sheet(s) of drawings supplied as formal drawings to replace the informal drawings originally filed with the Application. A separate letter to the Official Draftsperson is enclosed.

REMARKS

Please reconsider the Application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this Application and indicating that claims 3, 4, and 17 contain allowable subject matter. In the Office Action, the Examiner rejected claims 1 and 6-16 on the ground of non-statutory obviousness-type double patenting over claims of U.S. Patent No. 6,729,418. Next, the Examiner objected to claim 3 for lacking antecedent basis. Next, the Examiner rejected claims 1, 2, 5-7, and 10 under 35 U.S.C. §103 as unpatentable U.S. Patent Application Publication No. 2002/0088649 ("Morris") in view of U.S. Patent No. 4,036,313 ("Dixon"). Finally, the Examiner objected to claims 3, 4, and 17 as dependent upon a rejected base claim, but allowable if rewritten in independent form.

Interview Summary

Applicant thanks the Examiner for the Telephonic interview held on April 25, 2006. During the interview, the antecedent basis objection to claim 3 was discussed. During the interview, it was determined that the objection was made in error and that the Applicant would proceed to traverse the objection in this response.

Summary of Claim Amendments

Applicant respectfully requests the Application be amended as described herein. Particularly, claims 18 and 19 are added to more completely claim the disclosed invention. As the Applicant respectfully asserts new claims 18 and 19 are fully supported by the original specification, drawings, and claims, it is believed that no new matter is added. Furthermore, Applicant respectfully asserts that new claims 18 and 19 fall within the scope of the search

performed by the Examiner for original claims 1-17. Therefore, Applicant believes that no further search of the prior art is necessary.

Terminal Disclaimer

In response to the Examiner's objections based upon obviousness-type double patenting, Applicant respectfully submits a Terminal Disclaimer herewith. As such, the term of claims issuing from the present Application will be limited to the term of commonly-owned U.S. Patent No. 6,729,418.

Objection for Lack of Antecedent Basis

In the Office Action, the Examiner indicated an objection to claim 3 as lacking antecedent basis for the claim term "the cutting assembly." Applicant respectfully asserts that the phrase "the cutting assembly" is not present in the body of claim 3. As such, Applicant respectfully requests the objection to claim 3 be withdrawn and the claim be allowed to issue.

Rejection under 35 U.S.C. §103

The Examiner rejected claims 1, 2, 5-7 and 10 under 35 U.S.C. §103 as unpatentable over Morris in view of Dixon. In response, Applicant respectfully traverses on the grounds that the proposed combination does not disclose, teach, or suggest all of the elements as arranged in the claim. Furthermore, Applicant respectfully asserts that one of ordinary skill in the art would have had no motivation to combine the Morris and Dixon references at the time the present invention was made.

Claim 1 of the present Application is directed to a back reaming tool. As such, claim 1 requires the back reaming tool to have a tool body adapted to be coupled to a drill string and at least one cutting structure mounted to a leg and having cutting elements disposed thereon, wherein the leg is removably coupled to the tool body. In the Office Action, the Examiner proposed a combination of Morris with Dixon to render claim 1 obvious. Particularly, the Examiner proposed that Morris discloses a back reaming tool having a tool body (alleged as item **21**) that is adapted to be coupled to a drill string and cutting structures mounted on legs (alleged as item **23**). As Morris does not disclose item **23** as removably coupled to item **21**, the Examiner further suggests Dixon teaches a cutting structure **62** mounted on a leg (alleged as item **72**) that is detachably mounted to a tool body (alleged as item **60**).

In response, the Applicant respectfully asserts the Examiner is misinterpreting the Morris and Dixon references. Particularly, item **72** of Dixon is described as a “yoke member,” not as a leg as described by the present Application. (Dixon, column 3, ll. 55-57). Next, item **60** of Dixon, alleged to be a “tool body” in accordance with claims of the present Application, would be analogous to the “leg” of the present application, not the tool body. In contrast, the “tool body” of the present application is analogous to the combination of the central shank **28**, the torque plate **20**, the main frame plate **24**, and the flange plate **32** disclosed in Figure 2 of Dixon. As such, the “tool body” created by the combination of these members acts to transfer torque from the drillstring connected at **12** to the cutters **54**, and **62**. (Dixon, column 2, line 54 through column 3, line 40). Therefore, cutter **62** and yoke member **72** are removably coupled to the remainder of cutting leg **60**, but leg **60** is not removably coupled to main frame plate **24** (*i.e.*, the “tool body”) as required by

independent claim 1. It is clear from Figure 2, that leg member **60** (described as a “block” by Dixon) is welded to main frame plate **24** and is therefore not removably coupled.

Therefore, the proposed combination between Morris and Dixon does not disclose, suggest, or teach a back reamer having at least one cutting structure mounted to a leg, wherein the leg is removably coupled to the tool body. Instead, the proposed combination merely discloses a reamer wherein the at least one cutting structure is removable from the leg, but the leg itself is permanently coupled to the tool body. As such, the proposed combination is insufficient to properly reject claim 1 of the present Application under 35 U.S.C. §103. Furthermore, because claims 2, 5-7, and 10 all properly depend from claim 1 and are likewise narrower in scope, they are patentable over the proposed combination of Morris with Dixon as well.

Furthermore, Applicant respectfully objects to the proposed combination of Morris with Dixon as no motivation in the prior art to combine the two references has been shown. The Federal Circuit has ruled that “[i]n holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them *in the way* that would produce the claimed invention.” *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1385 (Fed. Cir. 2001) (emphasis added). Furthermore, there must be “some objective teaching in the prior art or that knowledge *generally available* to one of ordinary skill in the art *would lead that individual* to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (emphasis added).

As such, the Applicant respectfully asserts that there is no such teaching or generally available knowledge in the prior or in the references themselves art *that would lead* one of ordinary skill in the art to combine the Morris and Dixon references *in a way* that would produce the invention as claimed. The Examiner has provided no evidence to suggest such objective teaching to combine the relevant teachings *at the time the invention was made*, other than to allege such a combination is possible. As such, the Applicant respectfully alleges the Examiner is impermissibly using the Application as a road map to combine the cited references in hindsight.

Use of the present Application as a "road map" for selecting and combining prior art disclosures is wholly improper. See MPEP § 2143; Interconnect Planning Corp. v. Feil, 774 F.2d 1132 (Fed. Cir. 1985) (stating that "[t]he invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time"); In re Fritch, 972 F.2d 1260 (Fed. Cir. 1992) (stating that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious This court has previously stated that 'one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'"); In re Wesslau, 353 F.2d 238 (C.C.P.A. 1965) (stating that "it is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art")

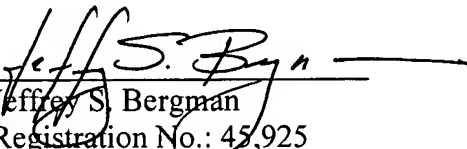
Therefore, the Applicant respectfully asserts that the proposed combination of Morris and Dixon is the result of impermissible hindsight reconstruction and is therefore not proper to reject

claims of the present Application under 35 U.S.C. §103. Particularly, no evidence has been proffered to show that one of ordinary skill in the art would be motivated, at the time the present invention was made, to combine the teachings of Morris and Dixon to arrive at the claimed invention. As such, the Applicant respectfully requests the Examiner withdraw the rejection of claims 1, 2, 5–7, and 10 under 35 U.S.C. §103 and allow them to issue.

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 05516/086003).

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Respectfully submitted,

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